2009 Academic Summit

Program Sponsors

Matthews Paint Company
D3
Jacobs Environmental Graphic Design
Zumar Industries

05.26.2009
Educational Program Summary Outline

Iowa State University

Program Summary
Iowa State University's Master of Arts in Environmental Graphic Design is a comprehensive exposure to all aspects of the discipline, including wayfinding, exhibit design, branded environments, symbology and placemaking. The program is taught within the graphic design program of the College of Design, which includes graduate programs in architecture, interior design, landscape architecture, planning and studio arts.

In addition to 8 courses that are EGD-specific, students are able to incorporate several courses from the other design programs in the college. Relevant interdisciplinary courses include Universal Design, Sustainability, Preservation, Metalsmithing and Lighting. In addition to studio coursework, students must complete several seminar courses that broaden their exposure to the history and theory of the design disciplines. These courses can be selected from over 25 elective options across the college in architecture, art, planning, interior design and landscape. Upon completion of their coursework, students select a focus area for their ‘creative component’, a major EGD design project.

As part of ISU’s mission as a Land Grant university, there is significant outreach to the community in many of the courses. The college’s Institute for Design Research and Outreach oversees and coordinates community design projects, including museum exhibitions, downtown district design, wayfinding systems, and placemaking projects. These projects provide students with experience with real world problems, interaction with clients, and accountability toward functional problem solving.

In the EGD specific courses, there is an emphasis on design process and problem solving. Design solutions must incorporate both visual and functional concerns. For example, wayfinding projects include not only the design of the signs, but complete analysis and sign schedules. Exhibition designs need to present an array of visitor interactions that appeal to multiple intelligences. Downtown design proposals must balance the needs of the district with those of the independent retailers.

Faculty
Lisa Fontaine, Associate Professor of Graphic Design, teaches the EGD-specific courses, while the remaining coursework is taught by faculty in graphic design, interior design, architecture, planning, landscape architecture, and studio arts.

Course Goals
Overall, the intention is to provide a comprehensive overview of the EGD profession. Since there are several EGD courses within the program, the individual goals of each will be listed separately:

Wayfinding Studio:
This course introduces students to both theoretical issues of navigation, site analysis, and the design of sign systems. Students learn to analyze wayfinding problems, and to propose solutions through comprehensive sign schedules. Working in teams, they design sign system graphics that are appropriate for the context and are ADA compliant. Since this course works for actual clients, the students also learn client interaction and learn to make design presentations.

Exhibit Design Studio:
This course focuses on museum exhibitions which include narrative storytelling and/or interactive learning components. Students learn to apply their skills in visual communication in an exhibit format. Emphasis is placed on creating a range of visitor interactions that allow for visitors of all abilities and
learning styles to engage meaningfully with the exhibit. Studio projects include exhibitions for science, children’s and history museums.

Symbology Studio:
This course explores symbolic forms such as pictograms, logos and icons by examining issues of simplicity, structure and meaning. Semiotic principles are examined to strengthen symbols, with the goal of enhancing clarity and comprehension.

Identity design Studio:
This course explores graphic identity and branded environments for large and small businesses. Students design both a logo and a complete identity system for an international corporation, applying the brand to both 2 and 3-d components. After completing the corporate identity project, students are also asked to consider the differing needs of small clients, through a downtown revitalization project. In this case, students work with a struggling downtown district to develop recommendations for the renovation of storefronts and the re-design of retail identities and signs. Since this project is for actual clients, the students also learn client interaction, and learn to make design presentations.

Usability:
This course covers the exploration and design of interface/interaction with products, systems, and technologies. While these interface designs can range from websites to electronic interfaces, EGD students can focus on usability problems in kiosk design, exhibitions, or other interfaces encountered in the built environment. In this course, students learn to employ user testing to better understand the communication and usability problems of interface designs.

Consumer Experience Design and Branding:
This course includes the theory and investigation of experience design as it applies to human interactions in contemporary society and culture. This course continues the exploration and design of identity systems and consumer brand experiences, incorporating a greater emphasis on the built environment and its potential to expand the brand message.

Professional Practice:
This course covers professional design management: ethics, setting up a new business, client/designer relationships, contractual options, billing practices, and effective operating procedures (students entering the program with prior professional experience do not need to take this class).

Advanced Typography Studio:
This course covers typographic theory exploring traditional and non-traditional forms, examining both historical and contemporary typographic achievements. Students learn to develop flexibility and precision in their typographic work (students entering the program with prior typographic experience do not need to take this class).

Lesson Plan Outline
Shown here are sample project descriptions from 2 of the EGD courses:

FROM THE WAYFINDING STUDIO:

Wayfinding Audit:
This analysis concentrates on the navigational infrastructure, not the design details of the signs. Your analysis should consider the following:
Description of the courthouse and its components:
- history, identity, and perception in the public eye
- how many visitors it has per year
- reasons why people visit the courthouse
Analysis of existing physical conditions: this includes your analysis of what currently exists (both changeable and unchangeable situations):
- the building’s circulation patterns
- identification of the various user groups
- existing signage (what works, what doesn’t, and why)
- inconsistencies in appearance and locations of signs
- missing signage
- naming or numbering inconsistencies
- visual clutter (and its causes)
- readability problems
- lighting problems contributing to navigational difficulties

Analysis of existing wayfinding problems: this section specifically considers how people find their way from one place to another:
- hierarchy of destinations (major to minor)
- describe major decision points and paths
- most common problems people have when navigating the building
- unique problems that exist due to odd locations or building structure
- most common destinations of first time visitors
- most common destinations of repeat visitors
- unique problems of disabled visitors (wheelchair, low vision, limited mobility)
- how people retrace their steps to the original entry point

Grading for this part of the project will include the following consideration:
- depth of analysis
- degree of completion
- photos included to support analysis

Navigation Plan:
After completing the analysis, you are ready to develop a strategic plan for how to improve on the current conditions. This plan concentrates on the navigational infrastructure, not the design details of the signs. It must include maps (plans) and photos. In addition to a written description, you will complete a sign schedule chart that shows the location and quantity of the signs you are proposing. This proposed navigation plan includes:
- purpose and locations of proposed new signs (shown on sign schedules and maps)
- description of the different sign types
- suggested changes in naming conventions
- proposed wayfinding aids (signs, color changes, etc)
- flexibility for future changes (explain strategies)

Grading for the project will include the following consideration:
- response to functional needs
- degree of completion
- clarity of excel sign schedules

Comprehensive Sign Design System:
As a team, you will design a sign system that responds to all of the problems and goals you identified in your audit and proposed wayfinding solution. The system must have unifying features achieved through color, typography, materials and composition. Variety will be achieved as a result of the differing functions of each sign (for example, the shapes and mounting methods of directional signs may need to be distinct from those of orientation signs and identification signs).

The final system will include the following:
- directional signs
- major and minor identification signs
- orientation signs
In addition to your concerns with the design of the 2-dimensional surfaces of each sign, you will also need to consider the armature that supports or mounts each sign. In addition to submission of the Illustrator files, brief verbal explanations will include the following:
- dimensions of the signs
- materials used in signs
- interpretive qualities (if any) that respond to the building's architecture and identity
- how visual unity is achieved

be sure to have consensus on these recommendations with all of your team!

Grading for the project will include the following consideration:
- how the solution responds to problems and goals described
- systematic unity and variety
- typographic usage (both legibility and aesthetic concerns)
- grid system usage
- response to functional needs
- degree of completion
- map design
- accessibility issues (ADA compliance)
- creativity of solutions
- appropriateness to the building's architecture
- client presentation (powerpoint and oral presentation)

FROM THE EXHIBITION DESIGN STUDIO:

Interaction Museum Exhibitions:
This assignment will allow you to translate your two dimensional design skills to an interactive exhibit environment. It will introduce you to the basic formal and functional considerations that occur in this format. You will bring together the functional, sculptural, graphic, and interactive learning elements of a museum exhibition.

You will design a series of interactive exhibit stands for a children's museum. You will design 3 different interactive workstations that can communicate information about one of the assigned topics.

Phase 1: Develop the Interactive Components
You will decide on appropriate and interesting methods for conveying the exhibit's information. For each sub-topic, you'll need to work with some actual data that could be conveyed. What aspect of that topic would be the most engaging for a visitor to interact with? How might you communicate it? Consider some of the Interaction Types we have reviewed in class.

Your goal is to create a visually appealing method to convey the learning activity. At this stage, focus on the functionality of the visitor's interaction. While much of the informational elements will be presented through 2-dimensional surface treatments (images and text), the interactive components will involve such elements as buttons, levers, gears, and the cabinetry to house them. For example, you may think that the learning experience needs to be done as a guessing game activity, but what kind of buttons, levers or devices are used for guessing? What are the choices offered? How does the visitor know if they're right or wrong? What is the 'reward' for learning? In addition to the designing the graphic approach, your role involves aspects of information design, user testing, and basic issues of communication.
Phase 2: Design of the Exhibit Stands: structure, image, type, color
Now you will focus on the visual appeal and structure of the exhibit stands. How do your exhibits work as a visually cohesive system? Refine the look of the stands, add images, refine the headline fonts and color palettes. The design of these stands must accommodate the interactions you devised in phase 1.

Final Report
While the program is still very new, so we cannot yet fully assess its achievements; however, we can examine the achievements of the 1st student in the program, who has just completed her first year. During that time she has worked on an interdisciplinary design team, participated in the Hablamos Juntos symbol design project for SEGD, studied research methods, usability, and metal structures, and begun an independent exhibition design for a children's museum. Her interdisciplinary exposure suggests the kind of flexibility we are hoping for our students.

Since the new MA program is based on a series of existing courses that have been running for many years, it is reasonable to assess the achievements of those individual EGD courses:

Our wayfinding class is considered to be an excellent preparation for the profession, according to many employers. Since the students have limited background in 3-d design, there is a steep learning curve. Improvements in the future would be to find a way to incorporate more information about materials.

Our Exhibit Design class engages the students in totally new types of design challenges. In-progress critiques with faculty from interior design and architecture offer great cross-disciplinary exposure. Future improvements to this course need to include ways to make 3-dimensional ideation more approachable for students who have previously only worked in 2-d.

In the identity design course, students learn to see the link between 2-d graphic identity and its 3-d application in the built environment. However, since this course is required of all our undergrads, there are many people in that course who have no interest in 3-d design. This brings considerable challenge to the instruction, but placing it in the context of identity design helps them to see the need for 3-d application of the corporate identity designs they create.

Samples of Student Work
Native Plant Sanctuary

William R. Stafford